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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,355	01/28/2004	Amy E. Battles	200400322-1	4891
22879 7590 09/25/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER LE, TUAN H	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 09/25/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/767,355

Applicant(s)

BATTLES ET AL.

Examiner

Tuan H. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION***Response to Arguments***

Applicant's arguments filed July 9, 2007 have been fully considered but they are not persuasive. Therefore, claims 1-25 maintain as being rejected.

Regarding **claims 1, 17, and 24**, applicant submits that White et al (U.S. Pat. 7,035,462) do not disclose *"animatedly presenting the at least one candidate as a magnified view in a center of the display screen and animatedly updating the digital image as the user navigates to a different candidate red-eye region"*, (Remarks, pg. 7 lines 23-26). However, the Examiner respectfully disagrees.

White et al discloses *"animatedly presenting the at least one candidate as magnified view in a center of a display screen 74"*, (White et al, Fig. 6 and column 11 lines 19-34, wherein an enlargement includes eye color defects selected by means 76).

In addition, White et al discloses *animatedly updating the digital image as the user navigates to a different candidate red-eye region."* (White et al, Figs. 6-8, wherein a counter for counting eye color defects when selection means 76 is pressed).

In addition, regarding **claim 17**, applicant submits that White et al (U.S. Pat. 7,035,462) do not disclose *"a graphical rejection device configured as an X mark superimposed through a candidate red-eye region not accepted by the user"*, (Remarks, pg. 7 lines 26-28). However, the Examiner respectfully disagrees.

White et al discloses *"a graphical rejection device configured as an X mark superimposed through a candidate red-eye region not accepted by the user"*, (White et

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al, column 6 lines 60-62 and column 9 lines 23-40, wherein an user can indicate rejection of a red-eye candidate and the indicator can take the shape of X mark).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 8-18, 21-25 are rejected under 35 U.S.C. 102(e) as being anticipated by White et al (U.S. Pat. 7,035,462 B2)

Regarding **claim 1**, White et al discloses that a method for removing red-eye effect in a digital image (see White et al, Fig. 2), comprising:

detecting automatically at least one candidate red-eye region within the digital image, (see White et al, Fig. 2 step 108, wherein red-eye detection algorithm is run);

presenting the at least one candidate red-eye region to a user (see White et al, Fig. 3, column 6 lines 63-67, indicators 50a-50d, wherein corrected 50a-50d positions can be chosen for further red-eye correction);

animatedly presenting the at least one candidate as magnified view in a center of a display screen 74 ", (White et al, Fig. 6 and column 11 lines 19-34, wherein an enlargement includes eye color defects selected by means 76);

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animatedly updating the digital image as the user navigates to a different candidate red-eye region (White et al, Figs. 6-8, wherein a counter for counting eye color defects when selection means 76 is pressed);

producing a modified digital image by performing red-eye removal in each candidate red-eye region that the user accepts (see White et al, Fig. 3, column 7 lines 3-7, wherein user highlights position for further red-eye correction and presses button 54, causing the red-eye correction algorithm automatically perform further correction), each candidate red-eye region that the user rejects remaining unmodified, (see White et al, column 7 lines 3-24, wherein non-highlighted position is not further corrected).

As for **claim 2**, as previously mentioned in the discussion of claim 1, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses saving the modified digital image, (see White et al, Fig. 2 step 126)

As for **claim 3**, as previously mentioned in the discussion of claim 1, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that a plurality of candidate red-eye regions (50a-50d) is detected within the digital image, (see White et al, Fig. 3).

As for **claim 4**, as previously mentioned in the discussion of claim 3, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that the plurality of candidate red-eye regions are presented to the user one at a time, (see White et al, Figs. 5a-5c, wherein a single indicator is representative of two eyes of a subject).

As for **claim 5**, as previously mentioned in the discussion of claim 3, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that the plurality of candidate red-eye regions are presented to the user simultaneously, (see White et al, Fig. 3, 50a-50d).

As for **claim 8**, as previously mentioned in the discussion of claim 1, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that an indication (a number) is provided that a selected candidate red-eye region is the Mth candidate red-eye region of N total candidate red-eye regions in the plurality, (see White et al, column 9 lines 32-38, wherein a number is used to indicate a corresponding red-eye effect).

As for **claim 9**, as previously mentioned in the discussion of claim 1, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that presenting the at least one candidate red-eye region to a user comprises marking the at least one candidate red-eye region, (see White et al, column 9 lines 23-25, wherein an indicator or other distinctive mark can be employed to indicate a red-eye effect).

As for **claim 10**, as previously mentioned in the discussion of claim 9, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that wherein marking the at least one candidate red-eye region comprises enclosing the at least one candidate red-eye region within a geometrical figure, (see White et al, Fig. 3, Figs. 5a-5f, column 9 lines 27-33, wherein geometrical figure can be one of star, circle, diamond, triangle, or square).

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As for **claim 11**, as previously mentioned in the discussion of claim 9, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that at least one icon (save V) accompanying a selected candidate red-eye region indicates how the user is to accept the selected candidate red-eye region, (see White et al, Fig. 7).

As for **claim 12**, as previously mentioned in the discussion of claim 9, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that at least one icon (cancel X) accompanying a selected candidate red-eye region indicates how the user is to reject the selected candidate red-eye region, (see White et al, Fig. 7).

As for **claim 13**, as previously mentioned in the discussion of claim 1, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that an indication (highlight) is provided of whether the at least one candidate red-eye region has been accepted by the user, (see White et al, column 6 lines 64-67, wherein corrected red-eye defects are highlight for further/additional correction).

As for **claim 14**, as previously mentioned in the discussion of claim 1, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that presenting the at least one candidate red-eye region to a user includes zooming in to show an enlarged view of a selected candidate red-eye region, (see White et al, Fig. 6, Fig. 7, wherein candidate red-eye region is enlarged).

As for **claim 15**, as previously mentioned in the discussion of claim 14, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses

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that the enlarged selected candidate red-eye region is automatically centered on a display (74), (see White et al, Fig. 6, Fig. 7, wherein candidate red-eye region is enlarged in a center of a display).

As for **claim 16**, as previously mentioned in the discussion of claim 1, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that all candidate red-eye regions are accepted simultaneously, (see White et al, column 7 lines 14-15, wherein user can select all corrected red-eye positions to be further corrected).

Regarding **claim 17**, White et al discloses an apparatus, (see White et al, Fig. 1), comprising:

- a memory (20) to store a digital image;

- red-eye detection logic (embedded in DSP 22) to detect automatically at least one candidate red-eye region in the digital image, (see White et al, column 6 lines 15-33, wherein red-eye detection algorithm is run);

- a display (24) on which to present the at least one candidate red-eye region to a user;

- a user interface (48) by which the user indicates whether to accept the at least one candidate red-eye region; wherein the user interface *animatedly presents the at least one candidate as magnified view near a center of a display screen 74* ", (White et al, Fig. 6 and column 11 lines 19-34, wherein an enlargement includes eye color defects selected by means 76) and *animatedly updates the digital image as the user navigates*

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to a different candidate red-eye region.” (White et al, Figs. 6-8, wherein a counter for counting eye color defects when selection means 76 is pressed).

red-eye removal logic (embedded in DSP 22) to produce a modified digital image by performing red-eye removal in each candidate red-eye region that the user accepts, each candidate red-eye region that the user rejects remaining unmodified, (see White et al, column 6 lines 15-33, wherein red-eye correction is performed);

a graphical rejection device configured as an X mark superimposed through a candidate red-eye region not accepted by the user, (White et al, column 6 lines 60-62 and column 9 lines 23-40, wherein an user can indicate rejection of a red-eye candidate and the indicator can take the shape of X mark).

As for **claim 18**, as previously mentioned in the discussion of claim 17, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that an imaging module (14) to convert an optical image to the digital image, (see White et al, Fig. 1);

As for **claim 21**, as previously mentioned in the discussion of claim 17, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that the user interface (image display 24) is configured to zoom in to show an enlarged view of a selected candidate red-eye region, (see White et al, Fig. 1, Fig. 6, Fig. 7, wherein candidate red-eye region is enlarged).

As for **claim 22**, as previously mentioned in the discussion of claim 21, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that the user interface (image display 24) is further configured to center the enlarged

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selected candidate red-eye region on the display (74), (see White et al, Fig. 1, Fig. 6, Fig. 7, wherein candidate red-eye region is enlarged in a center of a display).

As for **claim 23**, as previously mentioned in the discussion of claim 17, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that the apparatus is one of a digital camera, a digital camcorder, a personal computer, a workstation, a notebook computer, a laptop computer, and a personal digital assistant, (see White et al, column 4 lines 43-50, wherein the apparatus can be digital cameras, PDA, cellular phones, computer, digital camcorders).

Regarding **claim 24**, White et al discloses an apparatus, (see White et al, Fig. 1), comprising:

means (frame memory 20) for storing a digital image;

means (program embedded in DSP 22) for automatically detecting at least one candidate red-eye region in the digital image, (see White et al, column 6 lines 15-33, wherein red-eye detection algorithm is run);

means (image display 24), wherein it is a LCD) for presenting the at least one candidate red-eye region to a user;

means (display 74) for *animatedly presenting the at least one candidate as magnified view in a center of a display screen 74*, (White et al, Fig. 6 and column 11 lines 19-34, wherein an enlargement includes eye color defects selected by means 76).

means (user interface 48, wherein a four-direction switch is used) for the user to indicate whether to accept the at least one candidate red-eye region;

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means (counter) for *animatedly updating the digital image as the user navigates to a different candidate red-eye region.*" (White et al, Figs. 6-8, wherein a counter for counting eye color defects when selection means 76 is pressed).

means (program embedded in DSP 22) for producing a modified digital image by performing red-eye removal in each candidate red-eye region that the user accepts, each candidate red-eye region that the user rejects remaining unmodified (see White et al, column 6 lines 15-33, wherein red-eye correction is performed).

As for **claim 25**, as previously mentioned in the discussion of claim 24, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses means (14) for converting an optical image to the digital image, (see White et al, Fig. 1);

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al (U.S. Pat. 7,053,462).

As for **claim 6**, as previously mentioned in the discussion of claim 5, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that a first pair of opposing directional controls (76) is used to select a particular candidate red-eye region, (see White et al, Fig. 7).

However, White et al does not disclose that a second pair of opposing directional controls is used to perform one of acceptance and rejection of the particular candidate red-eye region.

On the other hand, White et al discloses ACCEPT, REJ. buttons (see White et al, Fig. 6) and a second pair of opposing directional controls (78) for selecting/indicating/modifying a level of correction for a selected particular eye color defect, (see White et al, Fig. 8, column 11 lines 39-42).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to swap the functions of the buttons and the second pair of opposing directional controls in order to form a four-way switch dedicated to red-eye correction because such swapping brings more convenience and effective control to users who are familiar with a four-way switch navigation.

As for **claim 7**, as previously mentioned in the discussion of claim 6, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that the first pair (76) of opposing directional controls comprises horizontal directional controls, (see White et al, Fig. 7) and the second pair (78) of opposing directional controls comprises vertical directional controls, (see White et al, Fig. 8).

As for **claim 19**, as previously mentioned in the discussion of claim 17, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that the user interface (48) comprises a first pair (76) of opposing directional controls to select a particular candidate red-eye region (see White et al, Fig. 7).

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However, White et al does not disclose that a second pair of opposing directional controls is used to perform one of acceptance and rejection of the particular candidate red-eye region.

On the other hand, White et al discloses ACCEPT, REJ. buttons (see White et al, Fig. 6) and a second pair of opposing directional controls (78) for selecting/indicating/modifying a level of correction for a selected particular eye color defect, (see White et al, Fig. 8, column 11 lines 39-42).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to swap the functions of the buttons and the second pair of opposing directional controls in order to form a four-way switch dedicated to red-eye correction because such swapping brings more convenience and effective control to users who are familiar with a four-way switch navigation.

As for **claim 20**, as previously mentioned in the discussion of claim 19, White et al discloses all of the limitations of the parent claim. In addition, White et al discloses that the first pair (76) of opposing directional controls comprises horizontal directional controls, (see White et al, Fig. 7) and the second pair (78) of opposing directional controls comprises vertical directional controls, (see White et al, Fig. 8).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Hardeberg (U.S. Pat. 6,728,401) discloses a system of correcting artifacts of a color image wherein image capture circuitry captures the color image and image processing circuit identifies and corrects artifacts in the color image.

Russon et al (U.S. Pat. 7,177,449) discloses an image correction system comprises a detection application accessible by a processor and adapted to identify a viewing direction of at least one eye of a subject within an image.

Lawton et al (U.S. Pat. 5,990,901) discloses an automatic application of digital image editing effects to a selected object in a digital image. Attributes of the object to be edited are interactively registered with the corresponding attributes in an abstract model of the type of object. An editing effect is then automatically applied to the selected object, using constraints determined by the properties of the model and the registered attributes.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Le whose telephone number is (571) 270-1130. The examiner can normally be reached on M-Th 7:30-5:00 F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan Le/

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal stroke extending to the right.

DAVID OMETZ
SUPERVISORY PATENT EXAMINER